

**MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes ☐
no ☒

Property Name: Building 1189 Inventory Number: HA-2147
Address: Aberdeen Area Historic district: ☐ yes ☒ no
City: Aberdeen Proving Ground (APG) Zip Code: 21005-5001 County: Harford
USGS Quadrangle(s): Spesutie
Property Owner: U.S. Army Garrison, APG Tax Account ID Number: _____
Tax Map Parcel Number(s): _____ Tax Map Number: _____
Project: Demolition of Building 1189 Agency: U.S. Army Garrison, APG
Agency Prepared By: R.C. Goodwin & Associates, Inc.
Preparer's Name: Dean Doerrfeld Date Prepared: 12/15/2006
Documentation is presented in: U.S. Army Garrison, APG, files and records. See bibliography in "Description of Property and Justification".
Preparer's Eligibility Recommendation: ☐ Eligibility recommended ☒ Eligibility not recommended
Criteria: ☐ A ☐ B ☐ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G
Complete if the property is a contributing or non-contributing resource to a NR district/property:
Name of the District/Property: _____
Inventory Number: _____ Eligible: ☐ yes ☐ no Listed: ☐ yes ☐ no
Site visit by MHT Staff ☐ yes ☒ no Name: _____ Date: _____

Description of Property and Justification: *(Please attach map and photo)*

General Description

Constructed to support the Nike Shock Tube tests; this cast concrete building is topped by a shallow-pitched gable roof. A single bay containing a single-leaf steel door opens the façade. A sliding, steel plate was once used to cover the door during testing. A similar door on the rear elevation mirrors the façade. A metal roof with metal-trimmed fascia covers the building. A single stove flue pierces the roof. Constructed in 1969, the building measures 20 by 40 feet.

Historic Context

Cold War (1946-1989)

The Cold War era generally is defined as the period beginning in 1946 following Soviet activities to retain territory liberated from Nazi Germany during World War II and extending to the fall of the Berlin wall in 1989. This period was marked by a tense,

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MHT Comments:

Jonathan Sages
Reviewer, Office of Preservation Services

12/10/07
Date

NA
Reviewer, National Register Program

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enclosure 2

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hostile relationship between the Warsaw Pact countries led by the U.S.S.R. and the North Atlantic Treaty Organization (NATO) Allies led by the U.S.A. The primary role of the U.S. Army during this time was to support U.S. policies of peace through strength by maintaining ground force readiness as an alternative to strategic nuclear weapons to deter communist expansion (U.S. Army Environmental Center (AEC) 1997).

The Cold War era was marked by major organizational changes in the armed forces and accompanied by competition for limited military appropriations among the services. Under the 1947 National Security Act, the Air Force became autonomous from the Army, and the Department of Defense was created. Under the new organizational structure, the Army assumed responsibility for conducting land warfare, providing troops for occupation duty in Central Europe, and providing air defense units within the continental U.S. In 1962, the Army's technical services were disbanded, and the Army Materiel Command (AMC) was established. This new command consolidated logistical functions to ensure integrated materiel management, including new product development, management of materiel stockpiles, testing, and technical and maintenance support (AEC 1997). The Ordnance Department and the Chemical Corps activities at APG were transferred to AMC.

The Cold War era also was marked by significant changes in U.S. Army operations. Instead of relying on a small standing army and mobilizing troops as needed, Army personnel were now ready to enter combat on short notice. This meant that a large, trained standing army was maintained in constant readiness. Troops were stationed for the first time in friendly foreign nations, under an allied command structure. Within the U.S., the Army maintained an active force prepared to deploy quickly into combat zones. During the Cold War, Army personnel were involved in conflicts in Korea and Vietnam, as well as in smaller actions, such as in the Caribbean (AEC 1997).

The Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties (AEC 1997) identified the following significant themes for Army military-industrial history during the Cold War: basic research (laboratories); materiel development and testing (research, development, engineering centers and proving grounds); wholesale logistical operations; air defense, ballistic missile defense and army missiles; command and control, communications, computers, and intelligence; Army school system; operational forces; Army medical activities; and, miscellaneous themes including nuclear power, Army aviation, and activities associated with other services or Department of Defense agencies.

The following historic context for the Cold War era is organized according to the themes outlined in the AEC report. Aberdeen Proving Ground supported activities that made significant contributions to the Army's development during the Cold War era in the areas of basic research, materiel development and testing, and education.

The Cold War at Aberdeen Proving Ground.

Following World War II, activities at APG were expanded in response to the Army's changing roles. During the Cold War era, APG functioned as a national Army center for basic scientific research, materiel development and testing (ordnance), and education (ordnance). Each activity actually was established at APG prior to World War II, but was greatly expanded during the Cold War era. Intelligence activities represented a minor mission at APG.

Basic Research.

During the Cold War, the U.S. Army took an active role in applying science to the development of the most technologically advanced weapons and equipment for ground forces. APG served as the Army's primary center for basic research, which was undertaken in three major laboratories: Ballistic Research Laboratories, Human Engineering Laboratories, and Coating and Chemical Laboratory. In 1992, these three laboratories were merged into the Army Research Laboratory (ARL).

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The Ballistic Research Laboratories (BRL) was an outgrowth of ordnance testing and development activities that had occurred since the establishment of APG as an ordnance proving ground. In 1935, a group of scientists was employed to study all phases of ballistic research. In 1938, the BRL was formally established. The BRL Headquarters (Building 328) and the Exterior Ballistic Laboratory (Building 120, which also housed the supersonic wind tunnel (closed in 1976)) were constructed during World War II. These buildings remained in use as essential research facilities during the Cold War.

The main purpose of the BRL was to conduct research in ballistics and related areas of technology as applied to U.S. Army weapons systems. This research included the study of firing and flight of projectiles as well as firing mechanisms, guns, and the ultimate effects of the projectile. By the end of World War II, a number of new conventional weapons, including artillery, anti-aircraft guns, howitzers, self-propelled weapons, tanks, and anti-tank guns, were still in developmental stages. Beginning in 1947, the U.S. Army began to redesign and to improve ground weapons to counter the advanced technology exhibited in foreign weapons collected from the U.S.S.R. and Germany at the end of the war. Most field artillery pieces and howitzers used during the 1950s and 1960s were modified World War II models. United Nations forces in Korea relied heavily on the U.S. 105mm and 155mm howitzers developed during the preceding war. The BRL also was the center of early experiments with rockets and missiles before the missile research and development center was relocated to Redstone Arsenal, Alabama, in 1950.

As technology grew more sophisticated during the Cold War, the activities of the BRL expanded to include research on weapons systems of all types. Studies conducted at the laboratories included the interior ballistics trajectories, gun chambers and gun tube motion and wear, ignition, and propellant formulation and combustion (interior ballistics); aerodynamics of bombs, shells and other missiles and prepared firing tables (exterior ballistics); and, the mechanical damaging mechanisms producing the terminal effects of conventional and special weapons (terminal ballistics). Studies also were undertaken to determine the vulnerability of military targets, weapons systems, munitions, and other equipment (vulnerability); the effects of radiation; improvements to weapon lethality; and, enhanced protection against enemy weapons. In addition, many types of research instruments were developed to perform, measure, and analyze the test results.

The developmental work undertaken at BRL was applied to a number of components of important Cold War-era military weapons. Some of these weapons included main battle tanks, specialized artillery, anti-tank missiles, and fighting vehicles. The main battle tanks affected by the developmental work conducted at BRL included the M60 introduced in 1960; the MBT70 undertaken as a joint venture with then West Germany; and, the M1 Abrams introduced during the late 1970s. The M2 Bradley Infantry Fighting Vehicle (IFV) was another weapon influenced by BRL research. Begun during the 1970s, the M2 entered service in 1981. The vehicle contains a 25mm cannon, machine guns, and anti-tank guided missiles.

Often technologies were pioneered initially by BRL, but then transferred to private industry or other government agencies for further development. The history of the computer at APG is an example of this trend. In order to refine firing tables, scientists at APG required a fast method to complete complex mathematical calculations. This requirement led to the development of the Electronic Numerical Integrator and Computer (ENIAC), a forerunner of the computer. ENIAC functioned using vacuum tubes. ENIAC was developed at the University of Pennsylvania with funding and design guidance from BRL. The machine was installed in an addition to Building 328 constructed in 1947. By 1952, BRL possessed three large-scale, high-speed, electronic digital computers, dedicated to solving defense problems: the ENIAC, the Ordnance Variable Automatic Computer (ORDVAC), and the Electronic Discreet Variable Automatic Calculator (EDVAC). By 1955, the ENIAC was outdated and taken out of service (Schmidt 1976). As requirements for mathematical modeling increased, the BRL constructed the BRL Electronic Scientific Computer II (BRLESC II), a solid-state digital computer. While the integrated circuits for the computer were manufactured by private industry, the logic design, back-panel wiring, and assembly were done by BRL personnel (Schmidt 1976). This was the last computer designed and assembled by BRL.

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By the mid 1970s, the BRL compound occupied approximately 70 acres surrounding Headquarters Building 328. Building 328 also contained the aerodynamic range, the world's first large-scale, fully-instrumented ballistic range that provided data on the aerodynamic characteristics of projectiles in flight. This range was constructed by the early 1950s. In 1982, the aerodynamics range was designated a National Historic Mechanical Engineering Landmark by the American Society of Mechanical Engineers (Schmidt 1976; Reed 1992). BRL laboratories included Interior Ballistics (Building 390), Exterior Ballistics (Buildings 120 and 327), Terminal Ballistics (Buildings 309 and 393), Concepts Analysis (Building 394), Library (Building 330), and Hollow Charge Facility (Building 391) (Ballistics Research Laboratories (BRL) 1974; BRL 1975; Schmidt 1976).

In addition to the main laboratory buildings, BRL operated a variety of specialized facilities. Many BRL field facilities were located on Spesutie Island and included barricaded positions for conducting live investigations into blast, penetration, or fragmentation effects. Spesutie Island was also the location of the Antenna Research and Electromagnetic Range Facility where millimeter wave control research and target acquisition, guidance and control research were undertaken. Research into lasers was conducted at the Laser Propagation Research Facility (Schmidt 1976).

Other facilities were located on the ranges of APG. In 1950, a transonic range was constructed near Michaelsville to conduct full-scale tests of shells under realistic conditions at subsonic, transonic, and supersonic speeds (BRL 1974). The Army Pulse Reactor Facility (APRF) (Buildings 860 and 861), constructed in 1968, also was located near Michaelsville. The purpose of this facility was to generate large fast neutron and gamma radiation within micro-seconds to test a variety of materiel in nuclear environments. In 1976, the operation of the reactor was transferred to the control of the Test and Evaluation Command and is operated by the Aberdeen Test Center (Schmidt 1976).

Two other laboratories active at APG during the Cold War era included the Human Engineering Laboratories and the Coating and Chemical Laboratory. The Human Engineering Laboratories (HEL) was founded in 1951. This laboratory was tasked with implementing a program to guarantee that new weapons were compatible with human abilities. HEL comprised three laboratories: System Research, Behavioral Research, and Engineering Research. The System Research Laboratory worked to incorporate human engineering into the development phases of weapons systems. This research explored such topics as how to reduce the noise of the M16 rifle firing, how to improve aiming accuracy, and how to improve night-lighting systems for personnel at missile installations. The Behavioral Research Laboratory was tasked to conduct general research to guide future development of weapons systems. Questions researched by this laboratory included television as a supplement to human vision, interactions of human senses to pinpoint targets, and effects of noise. The Engineering Research Laboratory designed and built testing instruments and apparatus to perform field evaluations (U.S. Army Aberdeen Research and Development Center (ARDC) ca. 1970).

The Coating and Chemical Laboratory was established as a separate laboratory in 1956. Before that date, this activity was part of Development and Proof Services. The laboratory performed research on organic coatings, cleaning and paint stripping compounds, automotive chemicals, fuels, hydraulic fluids, and lubricants. The goal of this research was to ensure that the best possible fuel was used to operate Army equipment and to prevent corrosion and deterioration to exterior equipment finishes (ARDC ca. 1970).

Missile Defense Systems

The BRL maintained two shock tube facilities. The first shock tube facility was constructed to research shock wave phenomena and gauge calibrations used to measure blast parameters of shock waves produced by high explosive and nuclear detonations (Schmidt 1976). In 1969, a second shock tube facility was constructed on Spesutie Island (Real Property Records). The original purpose of this facility was to study the effects of nuclear blasts on the operation of internal combustion engines. The facility was developed as part of the Nike-X generation of tactical nuclear missiles. Although constructed for the Nike-X Project Office at Redstone Arsenal, the facility was operated by BRL (Army Research and Development Newsmagazine 1967).

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The development of long-range, high-altitude aircraft in the late 1950s and early 1960s precluded the use of traditional anti-aircraft weapons and opened an age of increasing research and development into both offensive and defensive missile systems. Added impetus emerged with the Soviet and Chinese build-up of intercontinental ballistic missiles. Radar installations ringing the Arctic regions afforded an early detection capability of any attack crossing the North Pole and provided sufficient warning for the deployment of defensive weapons and coordination of retaliatory strikes. The Cuban Missile Crisis, however, illustrated the vulnerability of the United States from attacks originating elsewhere on the globe and the increasing sophistication of ballistic capable submarines pointed out that a directed line of defense could not address the growing threat of nuclear attack.

As early as 1958, the United States military deployed anti-ballistic missiles (ABM). Known as the Nike Zeus program, this defensive missile system employed long-range and mechanical radar to track and attack incoming missiles or aircraft. Although approved for deployment, the Army tried unsuccessfully to obtain the needed funding for production. The missile race promoted the design and deployment of Atlas, Titan, Minuteman, and Polaris with little surplus funding to consider countering equivalent Soviet weapons. Additional concern originated with the technical capacity of the Nike Zeus system. Its inability to discriminate between an incoming vehicle and decoys, the possibility of electro-magnetic pulses rendering the radar useless, the inaccuracy of the radar, and its ability to only acquire a single intercept at a time doomed the program. Although production funding was appropriated in 1961, it was never spent and no further funding for the program appeared in 1962 or 1963. Neither President Kennedy nor his defense secretary (Robert McNamara) considered Nike Zeus a wise investment. McNamara admitted that the system had the capabilities to counter existing threats, but that the rapid pace of missile development would soon render it obsolete (Moeller 2006; Lonquest and Winkler 2006).

In 1963, the Advanced Research Project Agency (ARPA) presented Project Defender, an undertaking that studied the most recent advances in radar, rocket propulsion systems, and data processing. ARPA believed that technological progress allowed for significant improvements in the existing Nike Zeus ABM program. Offering several variants, Nike-X became the preferred option due to its faster missiles, phased array radar, and faster computers. In addition to these improvements, Nike X consisted of two missiles: the Nike EX for exo-atmospheric interception and a shorter-range Sprint missile serving as a last line of defense should an incoming vehicle successfully pass through the long-range screen. The phased array radar and high-speed data processing equipment allowed Nike X to track multiple targets, a major improvement over Nike Zeus. Phased array radar equipment essentially uses multiple radar beams, of differing frequencies to "sweep" the skies without mechanical motion. The elimination of the mechanical rotation mechanisms not only removed this potential point of failure, but increased the speed of a 360 degree sweep nearly six-fold. The Nike X system initially used two phased array systems: perimeter acquisition radar (PAR) and multi-function array radar (MAR). The PAR would first detect incoming vehicles and within three seconds determine the trajectory of the target. The MAR tracked the incoming vehicles and guided the missiles to the assigned targets. First tested at White Sands Missile Range in 1964, MAR was soon replaced by Raytheon's missile site radar (MSR). The combined detection capabilities of the two radar arrays provided a layered defensive network. PAR detected incoming vehicles and calculated the point of impact, relaying this information to the MSR which then tracked the target. Although primitive by today's standards, the computer system of the Nike X was considered quite powerful, determining which warheads to intercept and taking information from the MSR to successfully guide the defense missile to its target (Moeller 2006; Lonquest and Winkler 2006).

Research efforts led to an Army request for production funding in 1966, but failed to garner support until 1968. A successful nuclear test by China in 1967 forced a redirection of the political aspects of an ABM system. Taken together with more open discussions between Washington and Moscow, including arms limitation talks, the growing threat of Communist China prompted political offices to emphasize a new nation as the primary threat to the U.S.A. (Nuclear ABMs of the USA 2006). The Nike system was deactivated at most locations within the continental United States by 1974, and were withdrawn from service in Alaska and Florida by 1979 (Nuclear ABMs of the USA 2006; The Nike Site 2006).

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Materiel Development and Testing.

APG continued its critical role as a proving ground for testing ordnance and automotive equipment during the Cold War era. Following World War II, APG remained the central Ordnance Department installation to test developmental prototypes, models, and final products for a wide range of automotive and conventional ordnance equipment. In 1962, a major Army reorganization resulted in the formation of the Test and Evaluation Command (TECOM), a subordinate command under Army Materiel Command (AMC). TECOM assumed responsibility for all test and evaluation activities formerly conducted by the individual technical services. The purpose of this new command was to streamline engineering and user testing during the design and production phases of materiel development, while ensuring that materiel met military requirements and contractual specifications. It also was charged to eliminate duplications of effort through integrated coordination and testing programs (U.S. Army Test and Evaluation Command (TECOM) 1987).

As an ordnance proving ground, APG became part of the TECOM system. Currently known as Aberdeen Test Center (ATC), ATC was known as U.S. Army Combat Systems Test Activity (CSTA) during the Cold War era. APG also became the location of TECOM headquarters. Building 314, a World War I-era steel-frame shop building, was stripped to its frame and completely rebuilt as the headquarters building.

During the Cold War, ATC was responsible for major engineering testing of vehicles, munitions, weapons, general equipment, and individual clothing and equipment; this was an outgrowth of ordnance testing activities begun in World War I and expanded during World War II. Conventional ordnance equipment tested at APG included artillery, anti-aircraft guns, howitzers, self-propelled weapons, tanks, and anti-tank guns. The ranges at APG accommodated weapons ranging from 5.56mm to 203mm ammunition shells. Tanks tested and evaluated at APG included the M60, the MBT70, and the M1 Abrams. Tanks often were tested and evaluated several times during the design process. Both individual performance tests were conducted as well as comparative tests between tank types and models. The largest artillery gun, the Atomic Cannon, also was tested at APG. Its 280mm gun barrel was developed to fire both conventional ammunition and nuclear shells; the gun was tested with conventional ammunition at APG. Automotive vehicles tested at APG included the Bradley Fighting Vehicle, Hmww (pronounced "Hum-vee"), and the full range of trucks, personnel utility vehicles, and cargo carriers. Small arms tested at APG included the M16 rifle. Many ordnance items tested at APG are represented in the collections of the Ordnance Museum. Specialized programs included testing prototypes for the lunar vehicle mobility system used during lunar landings (TECOM 1987).

In addition to testing U.S. Army materiel, examples of foreign equipment also were tested at APG to evaluate their overall characteristics and maintenance requirements and to develop effective disabling techniques. This program continued after World War II when technologically superior weapons collected from the U.S.S.R. and Germany were subjected to a battery of evaluative testing. Evaluation tests also were performed on materiel captured during the conflicts in Korea and Vietnam as a way to gauge the technological capabilities of Communist countries. In addition, the weapons of NATO allies also were evaluated to adapt the most advanced technologies into the U.S. Army arsenal.

Many Cold War testing activities occurred in buildings or facilities constructed before or during World War II. The Main Front remained the main test firing range. Additional ranges and support buildings were located at Mulberry Point, an area primarily developed during World War II. Automotive performance testing continued at the Munson Test Course, a course that has set the standard across the world for tactical vehicle testing. Additional facilities were constructed to support testing programs at a variety of firing ranges as required during the Cold War era. These facilities included a radar tracking site facility, a moving target simulator, and a number of special test laboratories (TECOM 1987).

In addition to facilities, testing activities often required specialized instruments. In 1947, mobile dynamometers were developed

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and placed in operation to evaluate the power characteristics of tanks and lighter vehicles. The dynamometer also was used to diagnose maintenance problems (Dwyer 1968).

Education.

During the Cold War, education of Army personnel continued to be an important activity. To maintain a constant state of readiness, the Army trained troops to perform under dangerous and uncertain conditions. In addition, the Army's continuing policy to adapt the latest technology required Army schools to train soldiers to use and maintain advanced equipment. At the beginning of the Cold War, the Army maintained schools both for general troop training and specialized technical training. In 1973, all schools were placed under Training and Doctrine Command (TRADOC) (AEC 1997).

The Ordnance School opened at APG in 1939 as the headquarters and principal training center for ordnance personnel. The school continued its vital training mission in the use and maintenance of ordnance throughout the Cold War era. After an initial decline in enrollment immediately following World War II, the school was expanded as a result of the Korean conflict. In 1962, the school was placed under the authority of the Continental Army Command, Fort Monroe, when the technical services were combined under Army Materiel Command. At that time, the school name was changed to the U.S. Army Ordnance Center and School. During the 1960s, school attendance again rose in response to the conflict in Vietnam. In 1967, the school graduated more than 1,100 automotive fuel and electrical repairmen to maintain Army ordnance equipment, particularly tanks and automotive vehicles. At the beginning of the Cold War era, hands-on training was emphasized. The expansion of computer technology has revolutionized course materials, teaching, and research methods (Aberdeen Proving Ground (APG) 1971).

During the Cold War era, the school was expanded through the construction of permanent facilities. During the 1950s, two concrete-block school buildings (Buildings 3147 and 3148) were constructed, completing the design of the second campus begun with the construction of the Moderne-style Building 3144 in 1943. Additional repair and maintenance training facilities also were built. During the Cold War era, permanent masonry barracks and student support buildings were constructed to replace World War II temporary barracks.

Intelligence Activities.

Technical intelligence activities also were supported at APG through the acquisition and study of both Allied and captured enemy weaponry. This activity was operational during World War II and the Korean conflict. During the Korean Conflict, museum personnel evaluated Chinese and Russian equipment in terms of effectiveness in comparison with U.S. equipment. Technical intelligence activities became a regular Army mission in 1966 to study enemy ordnance and armored vehicles met in field actions (Dr. Atwater 1998). This activity was carried out by Company D of the 519th Military Intelligence (MI) Battalion, later called the 11th MI company, and renamed the 203d MI Battalion in 1995 (203d MI Battalion 1998).

Identified Properties.

A total of 597 buildings were constructed at Aberdeen Area during the Cold War era. The largest numbers of buildings represent housing and community support, including Wherry housing units and new barracks. These buildings provided improved living standards to personnel serving in the peacetime standing Army. Administration, recreational facilities, storehouses and utility buildings also were added to the installation. These types of buildings generally represented standardized construction. Mission-related buildings constructed during this time generally supported specific research, development, testing and evaluation programs or educational buildings. Often the testing facilities were unique buildings designed to house specific functions (Dunne 1998).

In general, buildings must be older than 50 years of age to be eligible for listing in the National Register of Historic Places. Properties that have achieved significance within the last 50 years may be eligible for listing in the National Register if they are of

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exceptional importance under Criteria Consideration G of the National Register Criteria for Evaluation (U.S. Department of the Interior 1991). The Army has developed additional guidance for evaluating Cold War-era properties in DA PAM 200-4 (Section 3-3.d(2)(b)) as follows:

The Criterion of Exceptional Importance is applied to properties that are less than 50 years old in order to evaluate the National Register eligibility pursuant to 36 CFR 60.4. A Cold War property may have significance under National Register criteria A-D, due to association with major historical events or persons, technological or scientific design achievement, or as a fragile survivor of a class of properties. The significance of Cold War era properties may lie at the national level in association with military themes directly tied to the Cold War, or at the state or local level under other themes.

The Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties (AEC 1997) documents the importance of the Army's military-industrial complex during the Cold Era and emphasizes the Army's direct response to the Cold War. Resources at APG that may possess qualities of significance for listing in the National Register of Historic Places under Criterion Consideration G will be those directly associated with the major APG missions of basic research, materiel development and testing, education, and medical activities. Resources constructed as administration, maintenance, storage, and housing and community support generally will not meet Criterion Consideration G. In addition to historical association, integrity of the resource is a critical component in the evaluation process. Resources that once served as laboratories or test facilities that have been remodeled for other uses, such as administration, may no longer possess sufficient integrity to convey their associations with important Cold War-era activities. Specific guidance on the application of the criteria for evaluation to Cold War era resources is contained in Chapter 7 of Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties (AEC 1997).

Evaluation

Building 1189 was evaluated against National Register guidelines to determine if it retained those qualities of significance and integrity to merit further consideration for eligibility to the National Register. This building is associated with the NIKE missile research conducted at Aberdeen Proving Ground during the Cold War Era (Criterion A). Assessing the National Register eligibility of Aberdeen Proving Ground, Cold War era resources represents a multi-stepped process. The National Register generally defines resources eligible for listing as being 50 years of age or older. Building 1189 fails to meet this threshold level. Exceptions to the age requirement can be made when buildings nearing 50-years old contribute to a historic district. Under this exception, the building must still contribute to the significance of the National Register District and retain integrity to the period of significance. There are no identified or potentially eligible National Register districts in the vicinity of this building. The National Register provides guidance on assessing individual resources of exceptional importance to the 50-year rule under Criteria Consideration G. Guidance provided by the Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties refines the application of the criteria of exceptional importance to those properties that relate directly to the Cold War Era Military-Industrial Context (USAEC 1997).

The U.S. Army guidance identifies associations in four areas or sub themes within Cold War Military history. Properties that relate directly to the Cold War Military-Industrial context are "defined as those that meet any or all of the following qualifications:

1. They were specifically constructed or used prior to 1989 to
 - Meet the perceived Soviet/communist military threat;
 - Project a force designed to influence Soviet policy; and
 - Affect global opinion of the relationship between the superpowers.
2. Through their architectural or engineering design, they clearly reflect one of the Cold War themes.

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3. They are directly related to the United States/Soviet relationship through association with a milestone event of the period.
4. They are directly related to a United States/Soviet relationship through association with the life of a person during the Cold War period (USAEC 1997:89).

In addition to meeting the qualifications of the Cold War Military-Industrial context, a resource must also satisfy National Register criteria and applicable Criteria Considerations. Building 1189 was evaluated against National Register of Historic Places criteria for significance and integrity for the period ca. 1969 to ca. 1974 when the U.S. Military began withdrawing the Nike system from service. Testing performed at Aberdeen Proving Ground on the Nike X program lasted a short time; possibly only one or two years, but no more than five years from the construction of the shock tube to the final abandonment of the Nike ABM program.

The most complex issue surrounding Building 1189 is the integrity of the resource. The continuing mission of Aberdeen Proving Ground results in a continually evolving landscape. Buildings frequently served for a limited time when a test is underway, then were abandoned, renovated, or removed to allow for new activities. This is the situation with Building 1189. Only two buildings survive from the Nike testing period: Building 1188 that housed mechanical equipment, and Building 1189 that served as a control center. The shock tubes and all other associated equipment were removed after the tests and only the concrete pads of the 36" and 24" tubes remain. This compromises the integrity of association, feeling, and design. The building lacks any contextual association with its designed purpose. Had the facility retained the shock tubes, compressors, air diaphragm, and related equipment, Building 1189 would contribute to the complex of structures and would be eligible for the National Register under the Cold War Era context; however, integrity "does demand enough physical presence to retain a 'preservable entity' that communicates relevant significance" (Advisory Council on Historic Preservation 1991:29). The loss of all other equipment associated with the Nike testing period raises questions about the integrity of these resources.

The property was evaluated under Criterion A for its association with events that have made a significant contribution to the broad patterns of our history. As designed and constructed originally, the building would achieve significance under Criterion A, and the Cold War Military-Industrial context under Qualification 3 within the theme of materiel development and testing; however, the resource must also hold integrity to the significant theme. Although the shells of the buildings reflect the design conceived during the late 1960s, the facility was radically altered during the 1970s and continues to experience alteration as the testing at Aberdeen Proving Ground evolves. The buildings that housed the equipment used in development and testing served as a shell within which research took place. The design, spatial relationships, and equipment within the complex of buildings and structures that composed the shock tube facility were critical to understanding the process and thus its significance and integrity. Currently associated with only one other element of the shock tube test facility, Building 1189 does not retain sufficient integrity of feeling, association, and design to merit further consideration for eligibility to the National Register of Historic Places under Criterion A, or to meet Criteria Consideration G as a resource of exceptional importance with the Cold War Era context.

The building was evaluated under Criterion B for association with individuals linking the research at the shock tube with the United States/Soviet relationship during the Cold War period. Archival research has yielded no specific information about the activities or impact of a person and Cold War relationships, and no scholarly judgement can be made about historic importance. Building 1189 does not possess association with individuals significant in local, state, or national history to merit further consideration for eligibility to the National Register of Historic Places under Criterion B.

In order to merit further consideration for eligibility to the National Register of Historic Places under Criterion C, a property must achieve significance within a historic context and retain integrity. The method of construction of the building is typical of those constructed throughout Aberdeen Proving Ground with cast concrete walls, industrial doors, and virtually no ornamentation. Building 1189 does not possess significant physical design or construction and does not merit further consideration for eligibility to the National Register of Historic Places under Criterion C.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____

Eligibility not recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

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Date

Reviewer, National Register Program

Date

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Additionally, Building 1189 is not 50 years old, and must satisfy Criteria Consideration G to merit further consideration for National Register eligibility. Building 1189 does not possess exceptional importance to meet the threshold requirements of Criteria Consideration G. Building 1189 served as a support structure, secondary to the primary mission of Aberdeen Proving Ground in the Cold War Era. This structure does not possess the qualities of significance or integrity for listing in the National Register of Historic Places.

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MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ Eligibility not recommended _____

Criteria: ___A___B___C___D Considerations: ___A___B___C___D___E___F___G

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The Nike Site

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Eligibility recommended _____

Eligibility not recommended _____

Criteria: ___A___B___C___D Considerations: ___A___B___C___D___E___F___G

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